

What Predicts Consumer Satisfaction With Treatment For Substance Users¹?

Data Report

This report examines some consumer and treatment characteristics that explain general satisfaction for consumers of substance use disorder (SUD) services. For a complete description of the survey process, see the 2003 Consumer Satisfaction Survey Report. This report also details the MSHIP questions and the scoring processes that were used to create the general satisfaction domain.

For this report, the SUDs consumer characteristics include gender and race. Ethnicity was not included because of the low numbers of responses to this question. Table 1 shows some descriptive statistics for satisfaction on this domain². Female consumers were significantly more likely to express satisfaction than were male consumers. Race was collapsed into two categories, white and non-white. Non-white consumers were significantly more likely to express satisfaction than were white consumers.

Treatment characteristics included referral source and length of time in treatment. Self-referred category includes consumers who were referred to services by family members or physicians. Consumers who reported being self referred were significantly more likely than those who were court-ordered to express satisfaction, as were

those who had been in treatment for longer than one year.

From these results, it appears that both consumer and treatment characteristics are important factors contributing to consumer satisfaction.

Table 1: Descriptive Statistics

	N	% Satisfied	% Not Satisfied
Race			
White	955	75.9	24.1
Non-white	715	81.9	18.9
Gender			
Male	1464	78.3	21.7
Female	451	83.8	16.2
Referral Source			
Self	415	91.3	8.7
Court	1322	76.5	23.5
Treatment Length			
1yr +	1605	88.4	11.6
Less than 1 year	276	78.2	21.8

*All were statistically significant at the $p \leq .01$ level³.

The next question is, which of these characteristics are better predictors of satisfaction? To address this question a logistic regression model was created to test all of the variables at one time⁴. The results of the logistic regression model are presented in Table 2. Referral source is the only variable that remains a statistically significant predictor of satisfaction when all the variables are considered together.

According to these results, a consumer that is self-referred is almost three

times more likely to express satisfaction than a consumer that is court-referred. None of the other variables, treatment or consumer characteristics, remain significant.

Table 2: Logistic Model Results for Predicting Satisfaction

	Exp(B)
Treatment Length (< 1 yr)	.65
Referral Source (self)	2.98*
Gender (female)	1.3
Race (White)	.80
Constant	4.65

* $p < .01$

Although the overall model is statistically significant – meaning that it does fit the data somewhat, other statistics are used to evaluate the usefulness of the model⁵. These other statistical findings lead to the conclusion that there are other consumer and treatment characteristics not available in the survey data that better explain general satisfaction – for example the type of program, or characteristics of the clinician.

What final conclusion can be drawn from these analyses?

For the results of this particular survey, it seems that the referring agency has the greatest impact on whether that consumer expresses satisfaction on the general satisfaction domain.

¹ Data collected via 2003 Annual Satisfaction Survey.

² The χ^2 (Chi-square) test is used to test the differences in satisfaction between the different categories. This statistic is used to describe the relationship between two or more categorical variables, in this case gender and satisfaction.

³ This difference was statistically significant at the .01 level, or in other words, the difference would occur by chance only 1 in 100 times

⁴ Logistic regression is a statistical technique used to predict a categorical dependent variable – in this case being "satisfied" as opposed to being "not satisfied" from a set of independent variables – the consumer and treatment characteristics.

⁵ For example, the c-statistic is used to determine how well a model predicts an outcome. A .5 value means the model is no better than flipping a coin for prediction – the c-statistic for this model is only about .6. Another statistic used in logistic regression, the Nagelkerke R^2 , is .07, which means that the consumer and treatment characteristics account for only about 7% of the "variation" in the outcome variable of satisfaction.